IN THE SPECIFICATION

Please replace the paragraph beginning at page 2, line 1 with the following amended paragraph:

The use of rotary couplings in this piping to ensure the leaktight rotational motion of the wheel to be controlled, relative to the chassis or static part of the vehicle, is well known. The static installation typically includes a section of piping fastened to the body of the vehicle, usually to a vehicle's fender, which is axially coupled to the outer end of the rotary coupling fastened to the wheel hub. Argentine patents 231,948 and 246,394 disclose rotary couplings in which the air connection to the static part is provided by the outer end of the coupling shaft or rotor. The term "outer" is used herein in relation to the vehicle's chassis or body, that is the connection is provided on the outer side of the wheel, for example using a piping of the type disclosed in ~~patent application P96-01-05973~~ Argentina Patent No. AR 5335 B1.

Please replace the paragraph beginning at page 2, line 11 with the following amended paragraph:

This system is of relative simplicity and does not affect mounting of the wheel on the axle's end but, as a drawback, the sealed connection and coupling are exposed to hitting against road curbs or other hard objects or to damages arising from slight accidents or contact with other vehicles, which may render useless the system on the wheel in question, as well as to any vibrations of the vehicle in motion, the movement of the tire axle suspension relative to the vehicle's body, weather conditions, the contact with air, which subject the system to mechanical, thermal and dynamic stresses of different degrees and oscillations which may affect the useful life of the system, as disclosed for example in ~~Argentine patent application P970105,633~~ Argentina Publication No. AR 009836 A3.

Please replace the paragraph beginning at page 5, line 17 with the following amended paragraph:

In a further embodiment of the invention, a compact construction is ~~developped~~ developed for the rotary coupling to reduce its ~~esposition~~ exposition on the sides of the truck.

Please add the following text before the paragraph beginning at page 6, line 6:

-- Figure 4D is a longitudinal sectional view of a conventional solid-end half-axle prior to installing the connection of Figures 3 and 4A-4C.

Figures 4E to 4Z show a sequence of steps of a method for installing the connection of the solid-end half-axle of Figure 3 and 4A-4C. --

Please add the following text before the paragraph beginning at page 6, line 12:

-- Figure 6C is a longitudinal sectional view of a conventional hollow-end half-axle prior to installing the connection of Figures 5 and 6A-6B. --

Please replace the paragraph beginning at page 6, line 12 with the following amended paragraph:

~~Figure 5~~ Figure 7 is a longitudinal sectional view of a semisolid-end half-axle in which a connection has been installed according to an embodiment of the present invention to convey pressurized air from the tank or reservoir of the control system of Figure 1 to a coupling as shown in Figure 8.

Please add the following text before the paragraph beginning at page 6, line 16:

-- Figure 7A is a longitudinal sectional view of a conventional semisolid-end half-axle prior to installing the connection of Figure 7. --

Please replace the paragraph beginning at page 7, line 8 with the following amended paragraph:

A check ~~valve16~~ valve 10 to automatically close air flow to the tires 21, when a leak exists greater than compensated by the compressor, and an air filter 17 are inserted in that pipe 13A. Filter 17 is placed in a suitable location accessible for periodical cleaning operations. The ~~stop~~ check valve ~~16~~ 10 may be located in place of some of the factory original plugs provided with the compressor's tank 11. An inflating valve 23 placed in an accessible location is added to the second pipe 13B by means of a T connection 22 in order to check the pressure in tires 21. This inflating valve 23 may be used during pressure calibration of the system to connect all required instruments such as a pressure gage.

Please replace the paragraph beginning at page 7, line 17 with the following amended paragraph:

Each end of each of axles 19 of the vehicle 29 is provided with a rotary coupling 25 providing a leaktight rotary connection through which air from tank 11 is redistributed by module 15 to tires 21. For this purpose, the nozzle conventionally housing the valve of each tire 21 is respectively connected to a coupling 25 in that axle end by means of a reinforced rubber and cloth tube 31, similar to that disclosed in ~~Argentine patent application P960105973~~ Argentina Patent No. AR 5335 B1. Coupling 25 provides a continuous leaktight connection between pipe 13B and ~~nozzles 19~~ tires 21, thus resolving the issue of the relative motion between them as a result of rotation of tire 21. In the case of tandem wheels, both tubes 31 are positioned in a diametrically opposed configuration for a better dynamic balancing of tires 21.

Please replace the paragraph beginning at page 8, line 6 with the following amended paragraph:

In particular, for each axle 19, indicator lights 27 comprise a red light 27R, a yellow light 27A and a green light 27R, each materialized by means of a light-emitting diode (LED) of the respective color. In the case illustrated, module 15 may control four axles 19, such that four red lights 27R, four yellow lights 27A and four green lights 27V are gathered in its panel. Each green light 27V indicates normal operation, that is the tires maintain their ~~adjustd~~ adjusted pressure. The red light indicates low air pressure in tank 11, in which case ~~stop~~ check valve ~~16~~ 10 is automatically closed by control module 15, thus disconnecting tires from pressurized air supply until a pressure sensor in the module indicates that tank 11 has recovered its operating pressure. A yellow light 27A is used to signal various fault codes in some axle 19, indicating that the system is inflating a tire 21 of the respective axle 19. Thus, if light 27A flickers intermittently, the driver may keep rolling. In the event of yellow light 27A being continuously on, the driver should stop the vehicle to repair the loss. Even worse, if light 27A flickers alternately with red light 27R, this means that the tire is very damaged and the driver must stop the vehicle immediately.

Please replace the paragraph beginning at page 9, line 1 with the following amended paragraph:

A conventional axle 19 having a 35 to 50 cm long solid axle end 19M at each end is shown in Figure 4D and the same axle end 19M with a connection installed according to an embodiment of the invention is shown in Figure 3. Figures 4A and 4B respectively show enlarged views of axle end 19M to which the rotary coupling is attached, and of the central point of axle 19 which receives the air intake from the control system of Figure 1, while Figure 4C shows a cross-sectional view of the solid axle end 19M.

Please replace the paragraph beginning at page 9, line 6 with the following six amended paragraphs:

As shown in Figures 4E to 4G, installation of the connection begins with preparing the axle end for the coupling by first drilling a 9-mm hole 141 all the way through the solid axle 19M end (figure 4E). A larger 20-mm hole 143 is then drilled from the axle end to a depth of about 28 mm (figure 4F), depending on the distance between the axle end and the coupling cover, typically between 22 and 53 mm. The depth of this hole 143 should be adjusted accordingly for distances outside this range. Finally, a 9.5-mm hole 81 is drilled down from the bottom of the larger hole 143 to a depth of 53 mm (figure 4G). Figure 4H shows a longitudinal section of the resulting stepped orifice 141-143-81. As shown in Figures 3 and 4A, a thread 81 is made using a 1/8" x 27 NPT tap, taking care of using a tap centering device such that thread 81 intended for fastening the rotary coupling 25 shaft is centered.

~~As shown in Figures 3 and 4B, threads are made in the holes 83 located~~ Preparation now turns to the middle of the axle 19 for making the connection illustrated in figure 4B. As illustrated in figure 4I, two transversal holes 83 are drilled side-by-side at least 50 mm apart (but not more than 200 mm apart) in the rear portion of axle 19~~, using 11 x 1.00 threads~~. Each hole 83 is made by first using a 7-mm drill bit, followed by a 11.75-mm bit before threading the hole 83 using a 1/4" x 18 NPT tap.

The axle 19 is now prepared for installation of the conduit illustrated in figure 3, following the steps illustrated in figures 4J to 4Y. A tool 145 having a tubular handle 147 and a resilient wire loop 149 is used for capturing the conduit 85 and pulling it through the transversal hole 83 as explained hereinafter. The wire loop 149 is flattened so that it may be inserted through the hole 83, expanding again inside the axle interior (figure 4J). A tube tool 82 is passed through the hole 81 at the end of the axle 19M, long enough for the free end thereof to pass inside the open loop 149 (figure 4K). The loop tool 145 is then pulled outwards so that the loop 149 closes, catching the tube tool 82 (figure 4L). A 4-mm tube 85 is inserted through the tube tool 82 and the loop tool 149 is used to pull the pair of tubes 85 and 82 out through the hole 83 (figures 4M to 4O).

The steel nipple 97 is greased and inserted in the axle end. The steel terminal is gripped in a mounting tool 151 provided together with accessories 145 and 149 in the toolkit (figure 4P). The steel tube is then inserted in the hole 141 until the tool 151 abuts against the axle end (figure 4Q). A washer 95 is placed on the terminal using the tool provided (figures 4R to 4U). A ¼" diameter polyamide tube 84 is passed inside the 1/4" x 18 NPT coupling. The thread is lubricated with liquid teflon and tightened to a torque of 12 lbs x ft (figure 4V).

Returning to the middle of the axle, a cone 153 is placed as illustrated (figure 4W) and then the nut 119, without tightening yet. The ¼" tube 84 is pulled through the hole 83 until it is not loose any more and then 15 mm of tube 84 is pushed back in and the nut 119 is gently tightened (figure 4X). Care must be exercised so as not to exceed the torque limit to avoid strangling the air-duct tube. The excess tube is cut off at the surface of the nut 119 (figure 4Y) making the nipple ready for connection to the air pressurizer system (figure 4Z).

~~, and an~~ A hexagonal tube 82 is placed in such holes 83. In addition, a ¼" diameter polyamide tube 84 to be used as an air duct is fitted inside such tube 82, as also shown in Figure 4C. The outer tube 82 is provided to protect the inner tube 84 such that contact of the polyamide tube 84 with the inner walls of axle 19 solid portion 19M, as a result of axle movements when the vehicle is in motion, is prevented from wearing down the polyamide tube 84. The hexagonal design of tube 82 prevents friction between the Teflon hose 84 and the walls of the hole drilled in the solid end of the axle 19. The hexagonal shape takes up any size differences existing in this area. Polyamide is chosen because of its good wear properties.

Please replace the paragraph beginning at page 10, line 11 with the following amended paragraph:

If the wheel axle is a longitudinally hollow axle 19H, that is without any internal reinforcement, as illustrated in figure 6C, a 10-mm diameter hole 109 is drilled in the rear portion and in the middle of the axle by means of a magnetic drilling machine, and a long tube 111 is passed through from end to end inside axle 19H, as shown in figure 5. An unthreaded end of the ¼” diameter polyamide tube 84 is inserted into the long tube 111, and the short tube threaded end is screwed into the polyamide tube 84.

Please add the following paragraph at page 10, line 28:

-- The steps of the above installation may follow a procedure similar to that illustrated between figures 4I and 4Z. --

Please replace the paragraph beginning at page 10, line 28 with the following amended paragraph:

For an installation in an axle 19 hollow end having an internal reinforcement 105, as shown in Figure 7, a 10 x 1.50 thread rivet 107 is placed in the end plug and riveted as shown in Figure 6A. The method depicted in ~~Figure 4B~~ Figures 4E and 4G to 4Z is then followed.

Please replace the paragraph beginning at page 10, line 28 with the following amended paragraph:

The block 37 is rotatably mounted around a shaft 49' by means of a pair of ball bearings 47 protected by an outer seal 67'. The inner end of shaft 49' of coupling 25' has a widened section 61, provided with an O-ring 68, for closely fitting one end of a hose 71 and a ~~circumpherential~~ circumferential tooth 69' which is useful for pulling the hose 71 out together with the coupling 25' when the latter is dismantled from the wheel hub, so that it may be replaced if necessary and in any case not hamper maintenance work on the wheel hub.